In the Claims

Claims 1-46 (canceled)

47. (previously presented) An RF power amplifier comprising:

a first switching device having first and second terminals;

a second switching device having first and second terminals, wherein the first and second switching devices are implemented using a complementary metal oxide semiconductor (CMOS), and wherein a voltage differential is applied between the first terminal of the first switching device and the first terminal of the second switching device;

an inductance coupled between the second terminal of the first switching device and the second terminal of the second switching device; and

a transformation network coupled between the first and second switching devices and a load.

48. (previously presented) The power amplifier of claim 47, wherein the first and second switching devices are driven by signals that repeatedly turn the devices on and off.

49. (previously presented) The power amplifier of claim 48, wherein the first and second switching devices are both cycled on during the same time period, and wherein the first and second switching devices are both cycled off during the same time period.

50. (previously presented) An RF power amplifier for a wireless communications system comprising:

a first transistor coupled to a first supply voltage node;

a second transistor coupled to second supply voltage node, wherein the first and second transistors are implemented using a complementary metal oxide semiconductor (CMOS);

an inductor coupled between the first and second transistors; and

wherein the first and second transistors are driven by repeatedly turning both transistors on and off.

51. (previously presented) The RF power amplifier of claim 50, further comprising:

a third transistor coupled to the voltage supply node; and

a fourth transistor coupled to ground, wherein there is an inductance between the third and fourth transistors.

52. (previously presented) The RF power amplifier of claim 51, wherein the third and fourth transistors are driven by repeatedly turning the third and fourth transistors on and off.

53. (previously presented) The RF power amplifier of claim 52, wherein current flowing between the third and fourth transistors while the third and fourth transistors are turned on drives a load.

54. (previously presented) The RF power amplifier of claim 51, wherein the RF power amplifier is configured such that the first and second transistors are both turned on and the third and fourth transistors are both turned off during a first time period.

55. (previously presented) The RF power amplifier of claim 54, wherein the RF power amplifier is configured such that the first and second transistors are both turned off and the third and fourth transistors are both turned on during a second time period.

56. (previously presented) An RF power amplifier for a wireless communications system comprising:

a first transistor formed using complementary metal oxide semiconductor (CMOS) technology;

a second transistor formed using CMOS technology;

an inductor coupled between the first and second transistors; and

wherein the first and second transistors are repeatedly turned on and off such that a voltage is applied to the inductor when the first and second transistors are turned on.

57. (previously presented) The RF power amplifier of claim 56, wherein a load is coupled to the inductor.

58. (previously presented) The RF power amplifier of claim 56, further comprising:

a third transistor; and

a fourth transistor, wherein there is an inductance between the third and fourth transistors.

59. (previously presented) The RF power amplifier of claim 58, wherein the third and fourth transistors are driven by repeatedly turning the third and fourth transistors on and off.

60. (previously presented) The RF power amplifier of claim 58, wherein the RF power amplifier is configured such that the first and second transistors are both turned on and the third and fourth transistors are both turned off during a first time period.

61. (previously presented) The RF power amplifier of claim 60, wherein the RF power amplifier is configured such that the first and second transistors are both turned off and the third and fourth transistors are both turned on during a second time period.

62. (previously presented) An RF power amplifier formed on a complementary metal oxide semiconductor (CMOS), the RF power amplifier comprising:

a first transistor coupled between a voltage supply node and a first output node;

a second transistor coupled between a second output node and ground, wherein there is an inductance between the first and second transistors;

a third transistor coupled to the voltage supply node; and

a fourth transistor coupled to ground, wherein there is an inductance between the third and fourth transistors.

63. (previously presented) The RF power amplifier of claim 62, wherein the RF power amplifier is configured such that the first and second transistors are both turned on and the third and fourth transistors are both turned off during a first time period.

64. (previously presented) The RF power amplifier of claim 63, wherein the RF power amplifier is configured such that the first and second transistors are both turned off and the third and fourth transistors are both turned on during a second time period.

65. (previously presented) The RF power amplifier of claim 62, wherein a load is coupled to the first and second output nodes.

66. (previously presented) The RF power amplifier of claim 65, wherein the load includes a reactive network.

67. (previously presented) The RF power amplifier of claim 62, wherein the first, second, third and fourth transistors are driven by signals that repeatedly turn the four transistors on and off.

68. (previously presented) The RF power amplifier of claim 67, wherein the first and second transistors are turned on during a first time period, and wherein the third and fourth transistors are turned off during the first time period.

69. (previously presented) The RF power amplifier of claim 68, wherein the third and fourth transistors are turned on during a second time period, and wherein the first and second transistors are turned off during the second time period.

70. (previously presented) The RF power amplifier of claim 62, further comprising a transformation network coupled to the first and second output nodes.

71. (previously presented) An RF power amplifier formed on a complementary metal oxide semiconductor (CMOS), the RF power amplifier comprising:

a first transistor coupled between a voltage supply node and a first output node;

a second transistor coupled between a second output node and ground, wherein there is an inductance between the first and second transistors;

a third transistor coupled to the voltage supply node;

a fourth transistor coupled to ground, wherein there is an inductance between the third and fourth transistors;

wherein, during a first time period, the first and second transistors are both turned on and the third and fourth transistors are both turned off; and

wherein, during a second time period, the first and second transistors are both turned off and the third and fourth transistors are both turned on.

72. (previously presented) The RF power amplifier of claim 71, wherein a load is coupled to the first and second output nodes.

73. (previously presented) The RF power amplifier of claim 72, wherein the load includes a reactive network.

74. (previously presented) The RF power amplifier of claim 71, wherein the first, second, third and fourth transistors are driven by signals that repeatedly turn the four transistors on and off.

75. (previously presented) The RF power amplifier of claim 71, further comprising a transformation network coupled to the first and second output nodes.

76. (previously presented) An RF power amplifier formed on a complementary metal oxide semiconductor (CMOS), the RF power amplifier comprising:

a first transistor coupled between a voltage supply node and a first output node;

a second transistor coupled between a second output node and ground;

an inductor coupled between the first and second transistors;

a third transistor coupled to the voltage supply node; and

a fourth transistor coupled to ground, wherein the first and second transistors are driven out of phase with the third and fourth transistors.

77. (previously presented) The RF power amplifier of claim 76, wherein there is an inductance between the third and fourth transistors.

78. (previously presented) The RF power amplifier of claim 76, wherein the RF power amplifier is configured such that the first and second transistors are both turned on and the third and fourth transistors are both turned off during a first time period.

79. (previously presented) The RF power amplifier of claim 78, wherein the RF power amplifier is configured such that the first and second transistors are both turned off and the third and fourth transistors are both turned on during a second time period.

80. (previously presented) The RF power amplifier of claim 76, wherein a load is coupled to the first and second output nodes.

81. (previously presented) The RF power amplifier of claim 80, wherein the load includes a reactive network.

82. (previously presented) The RF power amplifier of claim 76, wherein the first, second, third and fourth transistors are driven by signals that repeatedly turn the four transistors on and off.

83. (previously presented) The RF power amplifier of claim 82, wherein the first and second transistors are turned on during a first time period, and wherein the third and fourth transistors are turned off during the first time period.

84. (previously presented) The RF power amplifier of claim 83, wherein the third and fourth transistors are turned on during a second time period, and wherein the first and second transistors are turned off during the second time period.

85. (previously presented) The RF power amplifier of claim 76, further comprising a transformation network coupled to the first and second output nodes.